

Claims

- 10027193.12001
1. A method for a base site to quickly establish a CDMA dispatch call comprising the steps of:
 - 5 transmitting a broadcast page via an outbound paging channel that indicates an outbound traffic channel used for the dispatch call;
 - beginning to transmit the dispatch call via the traffic channel;
 - monitoring an inbound access channel for page responses to the broadcast page;
 - 10 when no page responses are received within a period of time, ceasing to transmit the dispatch call via the traffic channel;
 - and
 - deallocating the traffic channel.
 - 15 2. The method of claim 1 further comprising the step of continuing to transmit the dispatch call via the traffic channel when at least one page response is received within the period of time.
 - 20 3. The method of claim 1 wherein the period of time is equivalent to an amount of time for a base site to receive a page response to a broadcast page in a worst case scenario.
 4. The method of claim 3 wherein the period of time is predetermined.
 - 25 5. The method of claim 1 wherein the period of time is determined by the base site based on a history of time taken to respond to broadcast pages.

6. A base site comprising:

a transmitter;

a receiver; and

a controller, coupled to the transmitter and receiver, adapted to

- 5 instruct the transmitter to transmit a broadcast page via an outbound
paging channel that indicates an outbound traffic channel used for a
dispatch call, adapted to instruct the transmitter to transmit the dispatch
call via the traffic channel, adapted to instruct the receiver to monitor an
inbound access channel for page responses to the broadcast page; and
10 adapted to deallocate the traffic channel and to instruct the transmitter to
cease transmitting the dispatch call via the traffic channel when no page
responses are received within a period of time.

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7. A method for a CDMA mobile station (MS) to quickly join a CDMA dispatch call comprising the steps of:

receiving a broadcast page on an outbound paging channel that indicates an outbound traffic channel used for the dispatch call;

5 beginning to receive the dispatch call via the traffic channel;

transmitting a page response to the broadcast page subsequent to beginning to receive the dispatch call.

8. The method of claim 7 further comprising the step of continuing to receive the dispatch call via the traffic channel subsequent to transmitting the page response.

9. The method of claim 7 wherein the MS transmits the page response on an inbound common access channel.

10. The method of claim 9 wherein the MS transmits the page response in a manner that attempts to avoid concurrent page responses by other MSs.

11. The method of claim 10 wherein the inbound common access channel is a slotted response channel.

12. The method of claim 11 wherein the MS transmits the page response in a randomly determined slot.

13. The method of claim 11 wherein the MS transmits the page response in a slot determined based on the MS's identification number.

14. A mobile station (MS) comprising:

a transmitter;

a receiver adapted to receive a broadcast page on an outbound
paging channel that indicates an outbound traffic channel used for a
dispatch call; and

a processor, coupled to the transmitter and receiver, adapted to
instruct the receiver to begin to receive the dispatch call via the traffic
channel and adapted to subsequently instruct the transmitter to transmit a
page response to the broadcast page.

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